REMARKS

This application is believed to be in condition for allowance.

Status of the Claims

Claim 1 is amended in a manner consistent with paragraph 29 of the originally filed specification.

Claim 27 is cancelled.

Claims 1-3, 6-26, and 28-43 remain pending.

Claim Rejections-35 USC §103

Claims 1, 2, 6-8, 28-30, 42 and 43 stand rejected under 35 U.S.C. §103(a) as being unpatentable over VAUDAGNA et al. Applied Catalysis, 1997 ("VAUDAGNA"). This rejection is respectfully traversed for the reasons below.

The position of the Official Action emphasized that VAUDAGNA observes that the nature of surface tungsten species on $WOx-Al_2O_3$ depends on the amount of WO_3 and that for concentrations below 15% there appear tetrahedrically coordinated species of the WO_4^{-2} type.

The Official Action further stated that VAUDAGNA discloses a tungsten oxide on a zirconia support IT in table I, such catalyst comprises between 62 to 69% of tungsten in tetrahedral form. This range means that 62 to 69% of the

deposited tungsten is in the tetrahedral form, the rest of the deposited tungsten being in octahedral form.

However, in the claimed invention, the solid comprises a single layer of tungsten in the form of tetrahedral types in a quantity of between 15 % and 25 %. See, e.g., claim 1.

Now, VAUDAGNA discloses in page 270 that for more than 15 wt% of tungsten deposited on the support, the tungsten is both in tetrahedral and octahedral form, and that it is only when less than 15 wt% of tungsten is deposited on the support that the tungsten could be only in the tetrahedral form.

Contrary to VAUDAGNA, the claimed invention makes it possible to have a catalyst comprising a single layer of tungsten of tetrahedral form in a quantity of between 15 % and 25 %. Such a catalyst is obtained according to the method of the present invention. That is, an anion exchange between the zirconia and/or the titanium dioxide and peroxotungstic acid in an acidic medium having a pH lower than 3.

Therefore, as VAUDAGNA teaches away from the claimed solid features and VAUDAGNA utilizes a method that produces a different solid, VAUDAGNA fails to render obvious claims 1, 2, 6-8, 28-30, 42 and 43, and withdrawal of the rejection is respectfully requested.

Claims 3, 31-41 stand rejected under 35 U.S.C. §103(a) as being unpatentable over VAUDAGNA in view of SOHN et al.

Langmuir 1998 ("SOHN"). This rejection is respectfully traversed for the reasons below.

Claim 3 recites that the solid has a total acidity, measured by means of adsorption of ammonia, of between 0.1 and 0.5 mmol/g.

SOHN discloses the relationship between acidity and WO_3 content. However, there is nothing in SOHN which suggests that a catalyst with more than 15% tungsten having tetrahedric coordination could have such acidity.

Thus, SOHN is unable to remedy the shortcomings of the VAUDAGNA for reference purposes, and claim 3 and claims 31-41 are not obvious over VAUDAGNA in view of SOHN.

Therefore, withdrawal of the rejection is respectfully requested.

Conclusion

In view of the foregoing remarks, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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